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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,168	12/01/2003	David Bentley Craig	US-0016.01	8161
59075	7590	12/29/2009		
USAA (WW) Attn: Patent Counsel 9800 Fredericksburg Road San Antonio, TX 78288			EXAMINER WONG, ERIC TAK WAI	
			ART UNIT 3693	PAPER NUMBER
			NOTIFICATION DATE 12/29/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/725,168	<b>Applicant(s)</b> CRAIG ET AL.	
	<b>Examiner</b> ERIC T. WONG	<b>Art Unit</b> 3693	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,8-10,24,26,27,30 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8-10,24,26,27,30 and 44-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Status***

1. Claims 1, 3-5, 8-10, 24, 26-27, 30, and 44-51 are pending. Claims 1, 3-5, 8-9, 24, 26-27, 30, 44-51 were previously presented; and claim 10 is original.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 8, 24, 26-27, 30, 44, 46-48, 51 rejected under 35 U.S.C. 103(a) as being unpatentable over Chow (US PG-PUB 2002/0156720, cited in prior Office action) in view of Bhuyan (US PAT 7,158,998, cited in prior Office action), further in view of Rousseau (US PG-PUB 2003/0040997, cited in prior Office action).

4. Regarding claims 1 and 51, Chow teaches receiving personal information relating to the customer at a middleware tier comprising at least one transaction and database server, wherein said middleware tier is operatively coupled to said host processing system and to said web server (see FIG.1). Examiner asserts application server 120 is “middleware” and database 112, workflow system 150, security processing system 190, etc. are host processing systems. Support

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for this assertion can be found in Dinker (US Patent 6,944,788) for example. Dinker describes that application server space is often referred to as "middleware" and that application servers may provide services for performing various types of e-commerce transactions (see FIG.1, column 1 lines 24-29, column 3 lines 20-27). Chow further teaches determining an available account number; associating personal information with said available account number to create an electronic record; storing said electronic record in a repository to establish an electronic account relating to said customer; receiving transaction instructions from said customer relating to said electronic account; utilizing said electronic account, executing said transaction instructions (see abstract).

5. Chow does not explicitly teach determining that said host processing system is unavailable, storing the electronic record in a temporary repository, receiving and executing said transaction instructions, creating a log of executed transactions associated with said electronic account; determining that said host processing system is available; retrieving said transactions from said temporary repository; and copying said transactions to said host processing system.

6. Bhuyan teaches determining that a database system is unavailable, storing the electronic record in a temporary repository, receiving and executing transaction instructions, and creating a log of executed transactions, determining that said host processing system is available, retrieving said transactions from said temporary repository; and copying said transactions to said host processing system (see col. 1 lines 12-51 on database replication and coherency).

7. As shown above, Bhuyan teaches database replication. Database replication is a form of redundancy, which is the duplication of critical components of a system with the intention of increasing the reliability of the system, usually in the case of a backup or fail-safe. This is a fact

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which was old and well known in the art at the time of invention (for evidence of the use of redundancy in financial systems see eg. Magill, US PG-PUB 2004/0143542, paragraph 133).

Therefore, one of ordinary skill in the art would have appreciated at the time of Applicant's invention that the purpose of having redundant databases is so that an existing system may continue to perform its intended functions (eg. executing financial transactions) even if the primary database were to fail.

8. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Chow to include determining that a database system is unavailable, storing the electronic record in a temporary repository, receiving and executing transaction instructions, and creating a log of executed transactions, determining that said host processing system is available, retrieving said transactions from said temporary repository; and copying said transactions to said host processing system. The modification would have merely been the application of a known technique, ie. database replication, to a known method ready for improvement, ie. executing and recording transactions, yielding predictable results.

9. Examiner notes that a distinction must be made between a "system transaction" and a "database transaction". In the proposed combination of Chao and Bhuyan, a "system transaction" is the function that the system is originally designed to perform (ie. executing financial transactions) while a "database transaction" is merely the entry of data into the primary database.

10. Chow does not explicitly teach determining, at said middleware tier, an available account number while said host processing system is unavailable.

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11. Rousseau teaches determining, at a middleware tier, an available account number while a host processing system is unavailable (see abstract, claims 1-2). Examiner notes that the “backend interface” of Rousseau is a middleware tier while the backend systems are the host processing systems.

12. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Chow further with determining, at said middleware tier, an available account number while said host processing system is unavailable. The modification would have merely been the application of a known technique, ie. redundant account number distribution system, to a known method ready for improvement, ie. account opening process, yielding predictable results.

13. Regarding claim 3, Rousseau teaches wherein said available account number is calculated through application of a computer algorithm matching that utilized by said host processing system when said system is available. In particular, Rousseau teaches “a cache system capable of receiving and storing the account opening request, the account number and the validated customer information when an account activation system is unavailable and further capable sending the account opening request, the account number and the validated customer information to the account activation system when the account activation system is available, wherein the account number distribution system includes an unique account number repository from which the account number is allocated and distributed” (see claims 1-2). It would have been obvious to have modified Chow further with this feature in order to avoid duplicate account numbers.

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14. Regarding claim 4, Rousseau further teaches wherein said temporary repository comprises a new account queue.

15. Regarding claim 5, Rousseau further teaches wherein said electronic account is extracted from an inventory of blank electronic accounts (see claim 2).

16. Regarding claim 8, Chow further teaches wherein said host processing system comprises an online account management system selected from the group consisting of a brokerage management system, a mutual fund management system, an annuity management system, a financial account processing system, a mutual fund wrap management system, a separate managed account system, a deposit account management system, and a loan account management system.

17. Regarding claims 24, 26-27, 30, 44, 45-48, the claims are drawn to systems or computer-readable mediums associated with the method claims discussed in this section and are therefore deemed obvious over Chow in view of Bhuyan, further in view of Rousseau as applied above.

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18. Claims 9-10 and 49-50 rejected under 35 U.S.C. 103(a) as being unpatentable over Chow in view of Bhuyan, further in view of Rousseau, further in view of Applicant admission of prior art.

19. Regarding claims 9 and 49, Applicant admission of prior art teaches that it was old and well known in the art at the time of invention to keep track of how many items are in a queue. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modified the financial system of Chow further to include providing counting means for recording the number of accounts created during system unavailability. One skilled in the art would have been motivated to make the modification because it is useful to know how many items there are to process (eg. for using a counter in a loop in a computer program in order to copy logged transactions).

20. Regarding claims 10 and 50, Applicant admission of prior art teaches that it was old and well known in the art at the time of invention to reset counting means. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the financial system of Chow further to include resetting said counting means upon system availability. One skilled in the art would have been motivated to make the modification because it is useful to know how many items there are to process (eg. for using a counter in a loop in a computer program in order to copy logged transactions).



***Response to Arguments***

21. Applicant's arguments filed 10/9/2009 have been fully considered but they are not persuasive.

22. Applicant argues the step of "utilizing said electronic account, executing said transaction instructions" is performed after the step in claim 1 of "determining, at said middleware tier, that said host processing system is unavailable" and before the step in claim 1 of "determining that said host processing system is available". Thus, the transactions are executed while the host processing system is still determined to be unavailable. Bhuyan states that the "transaction is committed to a target database and the backup database of the target database when *both the target database and the backup database are available*." Bhuyan does describe transactions being recorded in a file when the databases are unavailable. However, these electronic transactions are not actually executed until both databases are available as shown above in the quote from Bhuyan. This is in contrast to the above-cited recitations of claim 1 wherein the transactions are executed while the host processing system is still determined to be unavailable (see pg. 9 of Remarks).

23. The argument is found unpersuasive for the following reasons:

24. Redundancy is the duplication of critical components of a system with the intention of increasing the reliability of the system, usually in the case of a backup or fail-safe. This is a fact which was old and well known in the art at the time of invention (for evidence see eg. Magill, US PG-PUB 2004/0143542, paragraph 133). Therefore, one of ordinary skill in the art would have appreciated that the purpose of having redundant databases is so that an existing system

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may continue to perform its intended functions (eg. executing financial transactions) even if the primary database was to fail.

25. Applicant argues that in the proposed combination of Chao and Bhuyan, transactions are not executed when the primary database is down. Examiner disagrees. As discussed above, one of ordinary skill in the art would have appreciated that the purpose of having redundant databases is so that an existing system may continue to perform its intended functions (eg. executing financial transactions) even if the primary database were to fail. A distinction must be made between a “system transaction” and a “database transaction”. In the proposed combination of Chao and Bhuyan, a “system transaction” is the function that the system is originally designed to perform (ie. executing financial transactions) while a “database transaction” is merely the entering of data into the primary database.

26. Having distinguished between the two different types of transactions, Applicant’s argument relies on the fact that Bhuyan does not disclose performing “database transactions” while the primary database is unavailable. As discussed above, the proposed combination of Chao and Bhuyan is able to perform “system transactions” while the primary database is down.

***Conclusion***

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC T. WONG whose telephone number is 571-270-3405. The examiner can normally be reached on Monday-Friday 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James A. Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A. Kramer/  
Supervisory Patent Examiner, Art Unit 3693

ERIC T. WONG  
Examiner  
Art Unit 3693

December 9, 2009